

REMARKS

Claims 1-24 are all the claims pending in the application. Claims 2, 4, 5, 7, 8, and 11-24, remain withdrawn from consideration as being directed to a non-elected invention. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Claim Rejections - 35 U.S.C. § 103

- The Examiner rejected claims 1 and 6 under §103(a) as being unpatentable over Japanese 03169644 to Kurotori (hereinafter Kurotori) in view of US Patent 4,752,784 to Saito et al. (hereinafter Saito '784) and US Patent 4,540,996 to Saito (hereinafter Saito '996). The Examiner repeats this rejection, *verbatim*, from the previous Office Action. Now, however, the Examiner has provided an English translation of Kurotori. Further, the Examiner admits that Kurotori fails to teach an insoluble resin that is melted by the application of heat. Accordingly, Applicants respectfully traverse this rejection because the references fail to teach or suggest all the elements as set forth in the claims.

One feature of the presently claimed invention resides in melting the insoluble resins in the ink by heat and fixing the ink on a final recording medium, thereby obtaining printed matter having strengthened multicolor images. Thus, as independently set forth in each one of claims 1 and 6, each of the inks comprises at least a coloring material and a disperse particulate resin component. As set forth on page 58 of the specification, the colored particles are contained in resin particles for dispersion for the purpose of improving the fixing property, i.e., when they are heated.¹

The Examiner now recognizes that Kurotori fails to teach an insoluble resin that is melted by the application of heat.² Indeed, in contrast to that set forth in Applicants' claims, Kurotori teaches that the ink contains a soluble dye and a soluble resin (i.e., an already dissolved resin),

¹ Specification at page 58, 2nd full paragraph.

² Office Action at page 6, 1st full paragraph.

and hence Kurotori is directed to improving the drying property of an organic solvent to fix images (see the paragraph bridging pages 3 and 4 in the English translation, page 2 (page 266), left upper column, line 5 in the original). Further, Kurotori specifically states that the resin used for fixing must “have high solubility in the main solvents described above and in the supplementary solvent.”³ Moreover, Kurotori states that after the ink is cooled to room temperature, “the resin used for fixing is dissolved.”⁴ Thus, Kurotori does not teach or suggest the above-noted feature of the invention, i.e., carrying out fixing by melting the insoluble resin with heat.

The Examiner cites Saito ‘784 as teaching an electrostatic field to eject ink. Further, the Examiner cites Saito ‘996 as teaching an ink jet print head which sequentially deposits drops of different color inks onto a recording medium. But neither Saito ‘784 nor Saito ‘996 teaches or suggests carrying out fixing by melting an insoluble resin with heat.

Therefore, even assuming that one of ordinary skill in the art were motivated to combine Kurotori, Saito ‘784 and Saito ‘996 as suggested by the Examiner, any such combination would still not teach or suggest all the elements as set forth in Applicants’ claims.

For at least any of the above reasons, claims 1 and 6 are not rendered obvious by Kurotori, Saito ‘784 and Saito ‘996.

- The Examiner rejected claims 3, 9, and 10, under §103(a) as being unpatentable over Kurotori in view of Saito ‘784, Saito ‘996, and further in view of US Patent 4,314,263 to Carley (hereinafter Carley).

Because this rejection is based on Kurotori, Saito ‘784 and Saito ‘996, the comments as set forth above are pertinent here as well. Further, Carley does not teach or suggest anything that would cure the above-noted deficiencies in the combination of Kurotori, Saito ‘784, and Saito ‘996. Accordingly, this rejection is believed to be in error and should be withdrawn.

³ English translation of Kurotori at paragraph bridging pages 8 and 9.

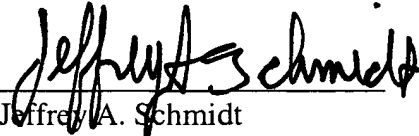
⁴ English translation of Kurotori at page 9, 1st full paragraph.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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